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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/868,606	09/17/2001	Heinrich-Jochen Blume	4117-US	2749

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12/05/2002

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EXAMINER

MULLINS, BURTON S

ART UNIT PAPER NUMBER

2834

DATE MAILED: 12/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/868,606

Applicant(s)

BLUME ET AL.

Examiner

Burton S. Mullins

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is **non-final**.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26-40 and 44-50 is/are rejected.
- 7) ☒ Claim(s) 41-43 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on September 17, 2001 has been considered by the examiner.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 35-40 and 45-50 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claims 35-36 and 39, recitations "cranked once," "crank" and "crankable" are clear. Does "crank" mean "bent"? In claim 38, "at a place where the stator is fitted" is vague since it is not clear what the action of "fitting" a stator means. In claim 45, recitation "being cut through and/or removed completely" is vague and indefinite. It is not clear if the "and/or" is exclusive or inclusive. If they are cut through, would they be "removed completely"? What exactly does "removed completely" mean? A

similar problem exists in claim 49. In claim 47, "the connection takes place by welding" is redundant. In claim 48, "zinc layer" is not clear. Are the laminations made of zinc?

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 26 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Hancock et al. (WO 90/11641). A multipole electric motor with a rotor 189 and stator 191 comprising plural coils A1-A4, B1-B4 and C1-C4 and U-shaped stator pole-pair laminations (stacks) 81 magnetically separated from one another (p.38, lines 19-21) and respectively extending from the coils to the rotor (Fig.14b) wherein the stator laminations 81 are connected in a region facing the rotor to a holder (base) 193 of non-magnetic metal, e.g., aluminum or zinc (p.38, lines 22-25). Regarding claim 32, Hancock teaches not only inside-out motors of the type of Figs.14a-14b but also inner-rotor configurations (Fig.11) with non-magnetic holder (yoke) 145 (p.35, lines 5-12). Regarding claim 32, Hancock teaches not only inside-out motors of the type of Figs.14a-14b but also inner-rotor configurations (Fig.11) with non-magnetic holder (yoke) 145 (p.35, lines 5-12).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 27-31 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hancock et al. (WO 90/11641). Though Hancock does not specify galvanized stator laminations or welding these to the holder, these are obvious engineering design considerations, as would be the choice of non-magnetic metal for the holder or drive gear configurations (claims 30-31 and 44).

9. Claims 26-37, 45-47 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simon et al. (US 6,194,797). Simon teaches a multipole electric motor with a rotor and stator comprising plural coils 4/5 and stator laminations 8-11 magnetically separated from one another (c.4, lines 22-24) and respectively extending from the coils to the rotor (Fig.1) wherein the stator laminations are connected in a region facing the rotor to a holder 7 of non-magnetic, plastic material. The laminations may be galvanized (c.3, line 11). Simon differs only in that the holder is plastic and not a metal.

However, it would have been obvious to one having ordinary skill in the art to employ a non-magnetic metal for the web in Simon since it has been held that choice of a known material such as a non-magnetic metal on the basis of its suitability for the intended use, i.e.,

preventing flux flow between laminations (Simon c.4, lines 21-24) involves obvious design choice. In re Leshin, 125 USPQ 416.

Regarding claims 28-32 and 44, though Simon does not specify galvanized stator laminations or welding these to the holder, these are obvious engineering design considerations, as would be the choice of non-magnetic metal for the holder or drive gear configurations.

Regarding claim 45, the web 7 bridging the laminations 8-11 is cut through by a laser beam (c.2, lines 16-19).

Allowable Subject Matter

10. Claims 38-40, 48 and 50 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. There is no teaching of bending opposed stator lamination pairs, as in claim 33. Regarding claim 38, the prior art does not teach a foot on the holder for mechanically fixing the stator at a place where the stator "is fitted" [sic]. The prior art does not teach the claimed process for producing an electric motor including choosing a welding current such that atoms of the holder migrate into a zinc layer of the pole laminations without altering the structure of the remaining metal of the laminations (claim 48). Neither does the prior art teach a pin positioning the holder and the workpiece (claim 50).

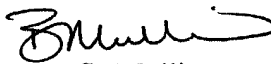
11. Claims 41-43 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim

and any intervening claims. The prior art does not teach a stator lamination with an opening into which a positioning pin protrudes (claim 41). Neither does the prior art teach "flattened portions" (in the form of indentations as in applicant's Fig.5) for facilitating fitting of the coils located at the stator lamination ends (claim 43).

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Burton S. Mullins whose telephone number is 305-7063. The examiner can normally be reached on Monday-Friday, 9 am to 5 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are 305-1341 for regular communications and 305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-0956.


Burton S. Mullins
Primary Examiner
Art Unit 2834

bsm
December 3, 2002